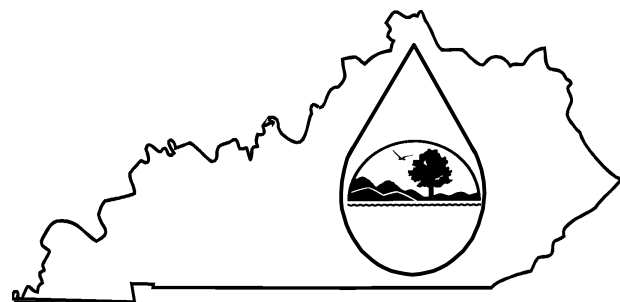


US EPA ARCHIVE DOCUMENT

# KPDES FORM C



## KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

### PERMIT APPLICATION

A complete application consists of this form and Form 1.  
For additional information, contact KPDES Branch, (502) 564-3410.

Name of Facility: <b>Ben Howard Branch Surface Mine</b>	County: <b>Bell</b>						
<b>I. OUTFALL LOCATION</b>	AGENCY USE						

For each outfall list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

Outfall No. (list)	LATITUDE			LONGITUDE			RECEIVING WATER (name)
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds	
Pond 1	36	51	31	83	31	00	Ben Howard Branch
DO 2	36	51	44	83	30	56	Ben Howard Branch
DO 3	36	51	39	83	30	47	UT of Ben Howard Branch
DO 4	36	51	41	83	30	40	UT of Ben Howard Branch
DO 5	36	51	40	83	30	26	UT of Ben Howard Branch
DO 6	36	51	37	83	30	23	UT of Ben Howard Branch
DO 7	36	51	33	83	30	28	UT of Ben Howard Branch
DO 8	36	51	26	83	30	30	UT of Ben Howard Branch
DO 9	36	51	25	83	30	35	UT of Ben Howard Branch
DO 10	36	51	24	83	30	38	UT of Ben Howard Branch
DO 11	36	51	24	83	30	45	UT of Ben Howard Branch
DO 12	36	51	19	83	30	49	Ben Howard Branch
DO 13	36	51	14	83	30	51	Ben Howard Branch
DO 13a	36	51	04	83	30	56	UT of Ben Howard Branch
DO 14	36	51	06	83	30	48	UT of Ben Howard Branch
DO 14a	36	51	01	83	30	47	UT of Ben Howard Branch

DO 15	36	50	49	83	30	45	Straight Creek
DO 16	36	50	59	83	30	43	Rough Branch
DO 16a	36	51	07	83	30	38	Rough Branch
DO 17	36	51	10	83	30	33	Rough Branch
DO 18	36	51	06	83	30	27	Rough Branch
DO 19	36	51	16	83	30	04	Cox Branch
DO 20	36	51	23	83	29	59	Cox Branch
DO 21	36	51	24	83	29	53	Cox Branch
DO 22	36	51	21	83	29	44	Cox Branch
DO 22a	36	51	30	83	29	45	Big Run
DO 23	36	51	37	83	29	49	Big Run
DO 24	36	51	44	83	29	53	Big Run
DO 25	36	51	49	83	30	02	UT of Big Run
DO 26	36	51	48	83	30	14	UT of Big Run
DO 27	36	51	03	83	30	23	Rough Branch
DO 27a	36	50	56	83	30	22	Rough Branch
DO 28	36	51	00	83	30	18	UT of Straight Creek
DO 28a	36	51	00	83	30	12	UT of Straight Creek
DO 29	36	51	06	83	30	13	UT of Straight Creek
DO 30	36	51	04	83	30	07	UT of Straight Creek
DO 31	36	51	07	83	30	04	Cox Branch
DO 32	36	51	11	83	30	03	Cox Branch

## II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

- A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfall. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.
- B. For each outfall, provide a description of: (1) all operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) the average flow contributed by each operation; and (3) the treatment received by the wastewater. Continue on additional sheets if necessary.

OUTFALL NO. (list)	OPERATION(S) CONTRIBUTING FLOW		TREATMENT	
	Operation (list)	Avg/Design Flow (include units)	Description	List Codes from Table C-1
Pond 1	Surface runoff	136.62 cfs (10 y peak)	Sedimentation	1-U
			Discharge to surface water	4-A
DO 2	Surface runoff	35.54 cfs (10 y peak)	Sedimentation	1-U
			Discharge to surface water	4-A
DO 3	Surface runoff	18.77 cfs (10 y peak)	Sedimentation	1-U
			Discharge to surface water	4-A
DO 4	Surface runoff	42.44 cfs (10 y peak)	Sedimentation	1-U
			Discharge to surface water	4-A
DO 5	Surface runoff	27.11 cfs (10 y peak)	Sedimentation	1-U
			Discharge to surface water	4-A
DO 6	Surface runoff	35.78 cfs (10 y peak)	Sedimentation	1-U
			Discharge to surface water	4-A
DO 7	Surface runoff	61.32 cfs (10 y peak)	Sedimentation	1-U
			Discharge to surface water	4-A
DO 8	Surface runoff	43.31 cfs (10 y peak)	Sedimentation	1-U
			Discharge to surface water	4-A
DO 9	Surface runoff	20.51 cfs (10 y peak)	Sedimentation	1-U
			Discharge to surface water	4-A
DO 10	Surface runoff	14.56 cfs (10 y peak)	Sedimentation	1-U
			Discharge to surface water	4-A
DO 11	Surface runoff	8.86 cfs (10 y peak)	Sedimentation	1-U
			Discharge to surface water	4-A
DO 12	Surface runoff	23.43 cfs (10 y peak)	Sedimentation	1-U
			Discharge to surface water	4-A
DO 13	Surface runoff	14.30 cfs (10 y peak)	Sedimentation	1-U
			Discharge to surface water	4-A
DO 13a	Surface runoff	9.12 cfs (10 y peak)	Sedimentation	1-U
			Discharge to surface water	4-A
DO 14	Surface runoff	38.59 cfs (10 y peak)	Sedimentation	1-U
			Discharge to surface water	4-A
DO 15	Surface runoff	3.98 cfs (10 y peak)	Sedimentation	1-U
			Discharge to surface water	4-A
DO 16	Surface runoff	9.51 cfs (10 y peak)	Sedimentation	1-U
			Discharge to surface water	4-A
DO 16a	Surface runoff	5.36 cfs (10 y peak)	Sedimentation	1-U
			Discharge to surface water	4-A
DO 17	Surface runoff	35.06 cfs (10 y peak)	Sedimentation	1-U
			Discharge to surface water	4-A
DO 18	Surface runoff	23.97 cfs (10 y peak)	Sedimentation	1-U
			Discharge to surface water	4-A
DO 19	Surface runoff	45.6 cfs (10 y peak)	Sedimentation	1-U
			Discharge to surface water	4-A
DO 20	Surface runoff	38.2 cfs (10 y peak)	Sedimentation	1-U
			Discharge to surface water	4-A
DO 21	Surface runoff	39.43 cfs (10 y peak)	Sedimentation	1-U
			Discharge to surface water	4-A
DO 22	Surface runoff	7.89 cfs (10 y peak)	Sedimentation	1-U
			Discharge to surface water	4-A
DO 22a	Surface runoff	10.98 cfs (10 y peak)	Sedimentation	1-U
			Discharge to surface water	4-A

DO 23	Surface runoff	22.22 cfs (10 y peak)	Sedimentation	1-U
			Discharge to surface water	4-A
DO 24	Surface runoff	39.23 cfs (10 y peak)	Sedimentation	1-U
			Discharge to surface water	4-A
DO 25	Surface runoff	31.32 cfs (10 y peak)	Sedimentation	1-U
			Discharge to surface water	4-A
DO 26	Surface runoff	31.89 cfs (10 y peak)	Sedimentation	1-U
			Discharge to surface water	4-A
DO 27	Surface runoff	12.81 cfs (10 y peak)	Sedimentation	1-U
			Discharge to surface water	4-A
DO 27a	Surface runoff	4.11 cfs (10 y peak)	Sedimentation	1-U
			Discharge to surface water	4-A
DO 28	Surface runoff	7.70 cfs (10 y peak)	Sedimentation	1-U
			Discharge to surface water	4-A
DO 28a	Surface runoff	2.85 cfs (10 y peak)	Sedimentation	1-U
			Discharge to surface water	4-A
DO 29	Surface runoff	17.12 cfs (10 y peak)	Sedimentation	1-U
			Discharge to surface water	4-A
DO 30	Surface runoff	11.57 cfs (10 y peak)	Sedimentation	1-U
			Discharge to surface water	4-A
DO 31	Surface runoff	7.28 cfs (10 y peak)	Sedimentation	1-U
			Discharge to surface water	4-A
DO 32	Surface runoff	19.69 cfs (10 y peak)	Sedimentation	1-U
			Discharge to surface water	4-A

## II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES (Continued)

C. Except for storm water runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?

☐

Yes (Complete the following table.)

☒

No (Go to Section III.)

OUTFALL NUMBER	OPERATIONS CONTRIBUTING FLOW	FREQUENCY		FLOW					
		Days Per Week	Months Per Year	Flow Rate (in mgd)		Total volume (specify with units)		Duration (in days)	
		(specify average)	(specify average)	Long-Term Average	Maximum Daily	Long-Term Average	Maximum Daily		
(list)	(list)								

## III. MAXIMUM PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?

☐

Yes (Complete Item III-B) List effluent guideline category:

☒

No (Go to Section IV)

B. Are the limitations in the applicable effluent guideline expressed in terms of production (or other measures of operation)?

☐

Yes (Complete Item III-C)

☒

No (Go to Section IV)

C. If you answered "Yes" to Item III-B, list the quantity which represents the actual measurement of your maximum level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

MAXIMUM QUANTITY			Affected Outfalls (list outfall numbers)
Quantity Per Day	Units of Measure	Operation, Product, Material, Etc. (specify)	

**IV. IMPROVEMENTS**

A. Are you now required by any federal, state or local authority to meet any implementation schedule for the construction, upgrading, or operation of wastewater equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders and grant or loan conditions.

☐ Yes (Complete the following table)      ☒ No (Go to Item IV-B)

IDENTIFICATION OF CONDITION AGREEMENT, ETC.	AFFECTED OUTFALLS		BRIEF DESCRIPTION OF PROJECT	FINAL COMPLIANCE DATE	
	No.	Source of Discharge		Required	Projected

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (or other environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

**V. INTAKE AND EFFLUENT CHARACTERISTICS**

A, B, & C: See instructions before proceeding – Complete one set of tables for each outfall – Annotate the outfall number in the space provided.  
NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered 5-18.

D. Use the space below to list any of the pollutants (refer to SARA Title III, Section 313) listed in Table C-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

POLLUTANT	SOURCE	POLLUTANT	SOURCE
NONE			

## VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

- A. Is any pollutant listed in Item V-C a substance or a component of a substance which you use or produce, or expect to use or produce over the next 5 years as an immediate or final product or byproduct?

☐

Yes (List all such pollutants below)

☒

No (Go to Item VI-B)

- B. Are your operations such that your raw materials, processes, or products can reasonably be expected to vary so that your discharge of pollutants may during the next 5 years exceed two times the maximum values reported in Item V?

☐

Yes (Complete Item VI-C)

☒

No (Go to Item VII)

- C. If you answered "Yes" to Item VI-B, explain below and describe in detail to the best of your ability at this time the sources and expected levels of such pollutants which you anticipate will be discharged from each outfall over the next 5 years. Continue on additional sheets if you need more space.

## VII. BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge of or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☐

Yes (Identify the test(s) and describe their purposes below)

☒

No (Go to Section VIII)

# **VIII. CONTRACT ANALYSIS INFORMATION**

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?



Yes (list the name, address, and telephone number of, and pollutants analyzed by each such laboratory or firm below)



No (Go to Section IX)

NAME	ADDRESS	TELEPHONE (Area code & number)	POLLUTANTS ANALYZED (list)
Summit Engineering Inc.	Big Rock Office Route 460 West 33102 Riverside Drive Big Rock, VA 24603	Tel: 276   530-7220	Total Suspended Solids Flow pH Conductivity Hardness Sulfate Iron, Total Manganese, Total Aluminum, Total
McCoy & McCoy Laboratories, Inc.	173 Island Creek Road Pikeville, KY 41501	606-432-3104	Antimony, Total Arsenic, Total Beryllium, Total Cadmium, Total Chromium, Total Copper, Total Lead, Total Mercury, Total Nickel, Total Selenium, Total Silver, total Thallium, Total Zinc, Total Cyanide, Total Phenols, Total



**IX. CERTIFICATION**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME AND OFFICIAL TITLE (type or print):

TELEPHONE NUMBER (area code and number):

*John Ledington Attorney-In-Fact**606-337-5393*

SIGNATURE

DATE

*John Ledington**7/9/09*

POWER OF ATTORNEY

STATE OF TENNESSEE     )  
COUNTY OF KNOX         )

KNOW ALL MEN BY THESE PRESENTS, that Xinerger, Corp., a Tennessee corporation (the "Corporation"), pursuant to the authorization of its Board of Directors, by and through its President & CEO, Jon E. Nix, hereby makes, constitutes and appoints John Ledington of the Commonwealth of Kentucky in his capacity as an employee and Chief Mining Engineer of the Corporation, its true and lawful attorney in fact, for it, and in its name, place and stead, to execute any and all documents, including but not limited to, reports, applications, and permits, which are necessary and in the ordinary course of business in the Corporation's dealings with the United States Department of Labor, Mining Safety and Health Administration; the Commonwealth of Kentucky, Environmental and Public Protection Cabinet, Department for Natural Resources; and any and all other regulatory offices, federal and state, that the Corporation may conduct business with in the course of its coal mining activities in the Commonwealth of Kentucky.

Xinerger, Corp., by and through its President & CEO, Jon E. Nix, hereby grants to said attorney in fact the full power and authority to perform all acts to be done in and about the premises as herein described, as the President & CEO could do personally on behalf of the Corporation, if personally present.

All rights, powers and authority of said attorney in fact to exercise any and all the rights and powers herein granted shall commence and be in full force and effect as of the date of execution hereof and such rights, powers, and authority shall remain in full force and effect thereafter until such time as Xinerger, Corp. revokes such appointment.

Giving and granting unto John Ledington, full power and authority to do and perform all and every act and thing whatsoever requisite and necessary to be done to carry out the intents and purposes as the President & CEO might do on behalf of the Corporation, if personally present. Xinerger, Corp., by and through its President & CEO, Jon E. Nix, hereby ratifies and confirms all that Xinerger, Corp. shall lawfully do or cause to be done by virtue of these presents.

PROVIDED, however, that all business transacted hereunder for Xinerger, Corp. or for its account shall be transacted in its name, and that all endorsements and instruments executed by its said attorney in fact for the purpose of carrying out the foregoing powers shall contain Xinerger, Corp.'s name, followed by that of its said attorney in fact and the designation "attorney in fact"

IN WITNESS WHEREOF, I have hereinto set my hand, this 10th day of July, 2008.

Xinerger, Corp.

By:   
Jon E. Nix, President & CEO

STATE OF TENNESSEE     )  
COUNTY OF KNOX         )

Personally appeared before me, the undersigned authority, Notary Public in and for said County and State, Jon E. Nix, President & CEO of the within named bargainor, with whom I am personally acquainted, who acknowledged himself to be the President & CEO of Xinerger, Corp., a Tennessee corporation, the within named bargainor, and who, upon oath, acknowledged that he executed the within Power of Attorney, with full authority from the Corporation, for the purposes therein contained in his capacity as President & CEO on behalf of the Corporation.

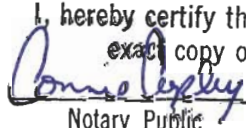
WITNESS my hand and official seal at office in Knox County, Tennessee this 10th day of July, 2008.

My Commission Expires



  
Notary Public

I, hereby certify that this is a true and exact copy of the original.

  
Notary Public

Date

State in Which Commissioned: KY

My Commission Expires: 5/9/12

**PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY.** You may report some or all of this information on separate sheets (use the same format) instead of completing these pages. (See instructions)

**\*The following tables include only those pollutants which are believed to be present in the sample or for which testing is required**

V. INTAKE AND EFFLUENT CHARACTERISTICS (Continued from page 3 of Form C)										OUTFALL NO.
Part A — You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.										
1. POLLUTANT	2. EFFLUENT				3. UNITS (specify if blank)			4. INTAKE (optional)		
	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)	d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value (1) Concentration	b. No. of Analyses
	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass						
Total Suspended Solids (TSS)	10					1	mg/L			
Flow (in units of MGD)	VALUE .0004		VALUE			1	MGD	VALUE		
pH	MINIMUM 8.5	MAXIMUM 8.5	MINIMUM	MAXIMUM		1	STANDARD UNITS			

Part B — In the MARK "X" column, place an "X" in the Believed Present column for each pollutant you know or have reason to believe is present. Place an "X" in the Believed Absent column for each pollutant you believe to be absent. If you mark the Believed Present column for any pollutant, you must provide the results of at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.												
1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT				4. UNITS		6. INTAKE (optional)			
	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)	d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value (1) Concentration	b. No. of Analyses
			(1) Concentration	(2) Mass	(1) Concentration	(2) Mass						
Hardness (as CaCO <sub>3</sub> )	X		752					1	mg/L			
Sulfate (as SO <sub>4</sub> ) (14808-79-8)	X		480					1	mg/L			
Iron, Total (7439-89-6)	X		0.18					1	mg/L			
Manganese, Total (7439-96-6)	X		0.76					1	mg/L			

**Part C** – If you are a primary industry and this outfall contains process wastewater, refer to Table C-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark “X” in the **Testing Required** column for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark this column (secondary industries, nonprocess wastewater outfalls, and non-required GC/MS fractions), mark “X” in the **Believed Present** column for each pollutant you know or have reason to believe is present. Mark “X” in the **Believed Absent** column for each pollutant you believe to be absent. If you mark either the **Testing Required** or **Believed Present** columns for any pollutant, you must provide the result of at least one analysis for that pollutant. Note that there are seven pages to this part; please review each carefully. Complete one table (all seven pages) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT And CAS NO. (if available)	2. MARK “X”			3. EFFLUENT				4. UNITS		5. INTAKE (optional)				
	a. Testing Required	a. Believed Present	b. Believed Absent	Maximum Daily Value (1)	a. Maximum 30-Day Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a.		b. No. of Analyses		
					(1)	(2)				Concentration	Mass		Long-Term Avg Value (1)	Mass (2)
METALS, CYANIDE AND TOTAL PHENOLS														
Antimony Total (7440-36-0)		X		0.002 (Below Detection Limit)					1	mg/L				
Arsenic, Total (7440-38-2)		X		0.002 (Below Detection Limit)					1	mg/L				
Beryllium Total (7440-41-7)		X		0.002 (Below Detection Limit)					1	mg/L				
Cadmium Total (7440-43-9)		X		0.002 (Below Detection Limit)					1	mg/L				
Chromium Total (7440-43-9)		X		0.002 (Below Detection Limit)					1	mg/L				
Copper Total (7550-50-8)		X		0.002 (Below Detection Limit)					1	mg/L				
Lead Total (7439-92-1)		X		0.002 (Below Detection Limit)					1	mg/L				
Mercury Total (7439-97-6)		X		3.57 x 10 <sup>-6</sup>					1	mg/L				
Nickel, Total (7440-02-0)		X		0.012					1	mg/L				
Selenium, Total (7782-49-2)		X		0.002					1	mg/L				

Part C – Continued															
1. POLLUTANT And CAS NO. (if available)	2. MARK “X”			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value (1) Concentration (2) Masses		b. Maximum 30-Day Value (if available) (1) Concentration (2) Mass		c. Long-Term Avg. Value (if available) (1) Concentration (2) Mass		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value (1) Concentration (2) Mass		b. No. of Analyses
METALS, CYANIDE AND TOTAL PHENOLS (Continued)															
Silver, Total (7440-28-0)		X		0.002 (Below Detection Limit)						1	mg/L				
Thallium, Total (7440-28-0)		X		0.0005 (Below Detection Limit)						1	mg/L				
Zinc, Total (7440-66-6)		X		0.099						1	mg/L				
Cyanide, Total (57-12-5)		X		0.02 (Below Detection Limit)						1	mg/L				
Phenols, Total		X		0.05 (Below Detection Limit)						1	mg/L				